

AMENDMENTS TO THE CLAIMS
PURSUANT TO REVISED 37 CFR § 1.121

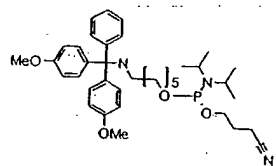
The following is a listing of claims that replaces all prior versions, and listings, of claims in the application:

1. (Currently amended) A method of labeling oligonucleotides, comprising:

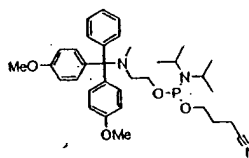
a) providing:

i) a solid support-bound oligonucleotide comprising an amino group;

ii) a bifunctional linker arm ~~comprising a hydrocarbon chain, a protected secondary amine, and a hydroxyl group~~ selected from the group consisting of:

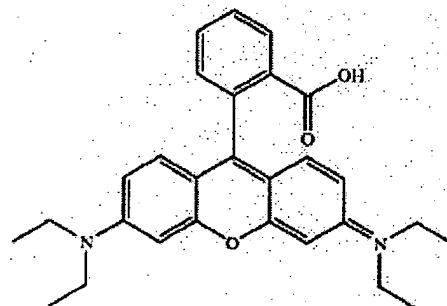
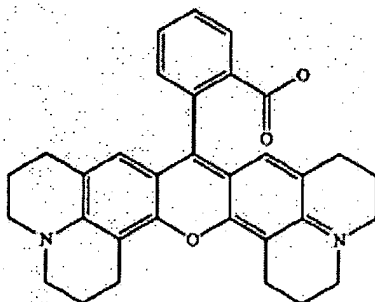
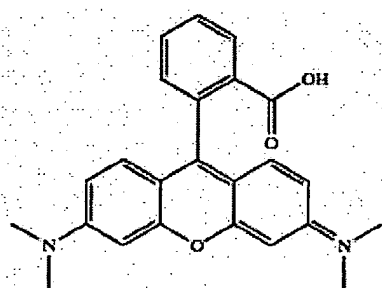


and



; and

iii) an *in situ* unactivated label selected from the group consisting of:



- b) reacting said solid support-bound oligonucleotide with said bifunctional linker arm to produce a support-bound, linker-oligonucleotide;
- c) reacting said *in situ* unactivated label to create an *in situ* activated label; and
- d) reacting said support-bound linker-oligonucleotide with said activated label to produce a labeled support-bound protected oligonucleotide.

2. (Cancelled)

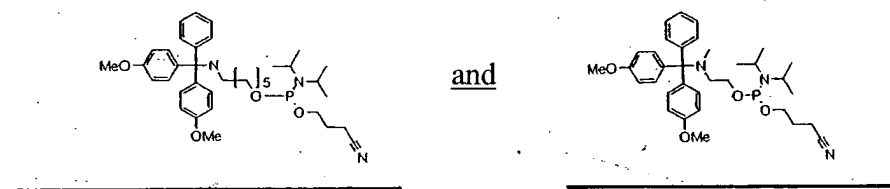
3. (Cancelled)

4. (Currently amended) A method of labeling oligonucleotides, comprising:

a) providing:

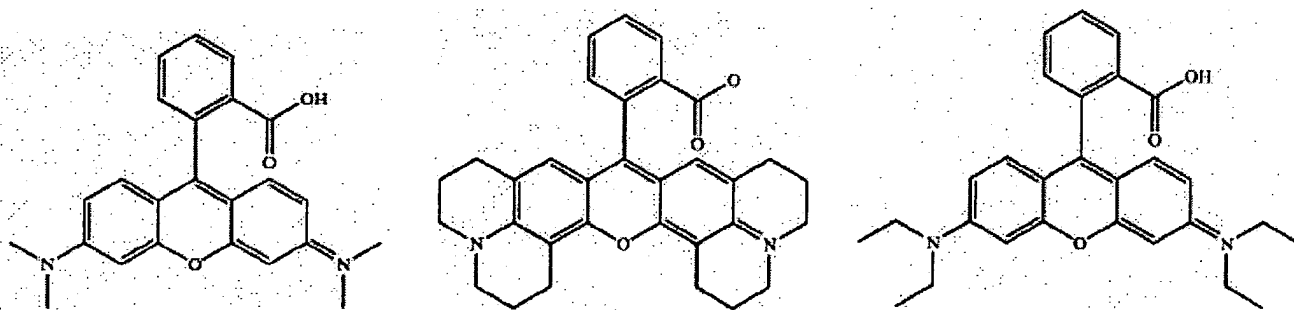
i) a solid support-bound oligonucleotide comprising an amino group;

ii) a bifunctional linker arm ~~comprising a hydrocarbon chain, a protected secondary amine, and a hydroxyl group~~ selected from the group consisting of:



; and

iii) an *in situ* unactivated label selected from the group consisting of:



b) reacting said solid support-bound oligonucleotide with said bifunctional linker arm to produce a support-bound, linker-oligonucleotide;

c) reacting said *in situ* unactivated label to create an *in situ* activated label;

d) deprotecting the amino group of said support-bound, protected linker-oligonucleotide to produce a support-bound deprotected linker-oligonucleotide, and;

e) reacting said support-bound deprotected linker-oligonucleotide with said activated label to produce a labeled support-bound protected oligonucleotide.